

Claims

1. A space truss characterized by a rectangular upper lattice and a rectangular lower lattice, each composed of chord members in vertical directions and in horizontal directions, said chord members intersecting with each other, and diagonal members coupling intersection points of said chord members in both of said lattices mutually,

wherein said chord members in the vertical directions and in the horizontal directions in both of said lattices are formed by using long rod members formed to have a length twice as long as a distance between the intersection points, said long rod members including coupling portions at both ends and at centers of said rod members, as main members, and by arranging a plurality of long rod members in the vertical directions and the horizontal directions, and by coupling ends of long rod members intersecting with a long rod member to a center of said latter long rod member at each of said intersection points, and by coupling a short rod member with an end of a chord member at which the length of said long rod members is too long in place of said long rod member, said short rod member formed to have a length equal to the distance between the intersecting points, said short rod member including coupling portions at both ends thereof,

wherein said diagonal members are formed by using bent rod members shaped in a letter V, said bent rod members having coupling portions at both ends and at centers of said rod members, as main members, and by arranging a plurality of bent rod members in a state of intersecting to each other and of intersecting with said chord members of both of said lattices diagonally at positions of said respective intersecting points, and by coupling ends of bent rod members intersecting with a bent rod member to a center of said latter bent rod member at each of said intersection points,

and by coupling a straight line rod member with an end of a diagonal member at which the length of said bent rod members is too long in place of said bent rod member, said straight line rod member formed to have a length equal to one side of the letter V of said bent rod members, said straight line rod member including coupling portions at both ends thereof.

2. The space truss according to claim 1, wherein said coupling portion at the center and said coupling portions at ends of each of said rod members are severally formed by flattening parts of said rod member.

3. The space truss according to claim 2, wherein said coupling portions at the centers and said coupling portions at the ends mutually have the same size, and said coupling portions of each of said rod members of said chord members in the vertical direction and in the horizontal direction and said diagonal members are laid on tops of others directly or with a spacer at each intersection points of both of said lattices, and said chord members and said diagonal members are coupled with one another by being fastened with bolts and nuts with washers arranged on both the sides of said coupling portions.

4. The space truss according to claim 2, wherein sizes of said coupling portions of the ends of each of said rod members are a half of a size of said coupling portion at the center of said rod member, and a reinforcing member is integrally provided on one side of each of said coupling portions, said reinforcing member also functioning as a spacer, and coupling portions of ends of two rod members of said chord members in the vertical directions and in the horizontal directions and said diagonal members, said two rod members intersecting with a rod member, are directly laid on

the top of said coupling portion at a center of said latter rod member in a state of being placed opposite to each other at each of said intersection points of both of said lattices, and each of said coupling members are mutually coupled by
5 being fastened by a plurality of bolts and nuts with washers disposed on both sides of said coupling members.

5. The space truss according to any one of claims 1-4, wherein at each of inside intersection points except
10 intersection points positioned at periphery portions of both of said lattices among each of said intersection points at which said chord members and said diagonal members are coupled to one another, a coupling numbers of said rod members of said chord members and said diagonal members are
15 severally three, and said chord members and said diagonal members are mutually coupled at each of said intersection points in the inside by the same coupling structure.